

Living Labs and Collaborative Innovation

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EDITORIAL

It is our pleasure to introduce you to this special issue in the *Journal of Innovation Management* (JIM) on the topic of Living Labs and Collaborative Innovation. Since their “big bang” with the establishment of the European Network of Living Labs (ENoLL) in 2006, living labs have been established worldwide to tackle an increasingly diverse variety of complex challenges such as urbanisation, agricultural sustainability and resilience, inequality, emerging technologies, etc. However, this surge in attention has been mainly driven by practice and policy, with the academic foundations lagging somewhat behind. With this special issue, we want to present you with an actual overview of current developments and achievements in living labs. Despite the wide variety of topics and domains in which they are being used and set-up, collaborative innovation is one of the main cornerstones of living lab practices. Therefore, there is a natural fit with the topic of Living Labs and Collaborative Innovation and the JIM, as it is an open access, multidisciplinary peer-reviewed journal, intending to publish cutting-edge research and findings on innovation and its management, bridging the gap between scientific research, policy making, and practice.

In our dual roles as guest editors of this special issue and co-leads of the Special Interest Group (SIG) on Living Labs of the International Society of Professional Innovation Management (ISPIM), we brought together 16 publications from four sources to form this special issue: the ISPIM Innovation Conference 2023 (4–7 June, Ljubljana, Slovenia), Open Living Labs Days 2023 (21–23 September, Barcelona, Spain), the first International Forum on Agroecosystem Living Labs 2023 (4–6 October, Montréal, Canada), and direct submissions based on the call for papers for this special issue.

Living labs are an increasingly popular approach to innovation (Greve et al., 2020, 2021; Leminen et al., 2012; Ballon et al., 2018; Schuurman et al., 2019; Schuurman et al., 2025). They are platforms with shared resources, which organize their stakeholders into collaboration networks that rely on representative governance, participation, open standards, and diverse activities and methods to gather, create, communicate, and deliver new knowledge, validated solutions, professional development, and social impact in real-life contexts (Westerlund et al., 2018; Paskaleva & Cooper, 2021). As open innovation intermediaries, living labs link the domains of open and user innovation and consist of three distinct, but intertwined levels of analysis: the living lab organization, living lab projects, and user and stakeholder involvement activities (Schuurman, 2015).

In this special issue, seven of the publications contribute to these conceptual foundations using cross-sectoral perspectives. First, through a comparative analysis of four living lab case studies, John (2024) explores the social relations that emerge within living labs, particularly how

different leading institutions (university, industry, city, and civil society) influence these dynamics. Next, Beckett and O'Loughlin (2024) highlight the need for theory-based reference models to guide living lab operations, emphasizing the importance of stakeholder experiential learning and impact assessment. Valkokari et al. (2024) review the literature on collaborative innovation and partnerships, identifying living labs as effective enablers of regional collaborative innovation among diverse stakeholders, and they use comparative case studies to identify success factors for collaboration. Santa et al. (2024) also use a case study approach, but their findings identify gaps between theory and practice for future research, namely in relation to fragmentation of theoretical frameworks, user involvement, definitions, evolutionary approaches to analysis, and theoretical understanding of real-life settings. Next, Santonen et al. (2024) examine expert perceptions of living lab value to define key value proposition elements for living labs across seven categories: 1) enhanced collaboration and networking opportunities, 2) increased validity and reliability, 3) improved innovation outcomes, 4) financial and process benefits, 5) positive outcomes for users and society, 6) a safe environment for research, development, and innovation, and 7) increased skills and capabilities. Rosetti et al. (2024) examine living labs in cultural and heritage sectors to advance theoretical modelling of living labs with cultural practices, propose a practical model for use across cultural fields, raise awareness of the potential of living labs for developing sustainable participatory practices, and identify contributions of cultural living labs to address broader challenges. An important topic that also takes a cross-sectoral perspective on living labs is research and results on outcomes and impacts (Ballon et al., 2019; Paskaleva & Cooper, 2021; Schuurman et al., 2025). Leminen et al. (2025) contribute to this topic with a case study of 26 living labs and their open innovation outcomes. Finally, Leminen & Westerlund (2025) develop within their letter a fourfold framework to categorize living labs based on the innovation paradigm (reductionist versus systemic) and the endeavours (accretive versus renewal) which leads to four research avenues for living lab studies.

Elsewhere, living labs have been documented to develop innovations and integrate innovativeness and resources for the benefit of diverse stakeholder in cities (Nyström et al., 2014; Leminen & Westerlund, 2019;) and to provide environmental and social improvements (Hossain et al., 2019; Nevens et al., 2013, Voytenko et al., 2016). Hence public and private sector living labs play a crucial role in promoting innovation in different ecosystems, industries, and sectors (Gascó, 2017; Shin, 2019). Living labs are also seen as places where innovations take place (Bergvall-Kåreborn et al., 2015; Della Santa et al., 2022). In an urban context, studies view a city and its neighbourhoods as platforms that enhance diverse forms of innovation (Leminen et al., 2017), especially where stakeholders such as municipalities and companies open their data, needs, and operation to boost innovativeness and urban development (Leminen et al., 2020). Indeed, two of the papers in this special issue focus on urban living labs. Willems and Schuurman (2024) examine the use of “digital twins” in urban settings to assist in policy and data-driven decision making, revealing that the urban living lab approach positively influenced the desirability and feasibility of the project while raising issues about the viability of a complete digital twin solution for a single city and yielded unintended learning about urban living lab processes and innovation management, leading to new collaboration methods and innovation opportunities for city officials in the studied case. Veil and Lehmann (2024) highlight the paradoxically underexplored but essential aspect of inclusion in living labs, finding that inclusion brings both individual and collective benefits if knowledge-sharing and perceptual challenges can be overcome.

Keeping to the theme of inclusion, DeBroux Leduc et al. (2024) examine social inclusion among older adults within the Living Lab Quartier Innovant (Innovative Neighbourhood) in Montréal, Canada, while presenting the governance structure, logic model, and evaluation matrix of this

living lab. Finally, in a corporate context, the letter by Son et al. (2024) reviews the current state of artificial intelligence (AI) and introduces the “AI Living Lab”, which aims to accelerate AI adoption, foster innovation, and enhance employee productivity and satisfaction.

Likewise, in rural, environmental, and agricultural contexts, living labs are increasingly seen as a way to accelerate the co-creation and adoption of innovations, promote sustainability, and facilitate system transitions (Zavratnik et al., 2019; Gamache et al., 2020; McPhee et al., 2021; Beaudoin et al., 2022). In this special issue, four of the publications focus on the agricultural context, reflecting their links to the first International Forum on Agroecosystem Living Labs in 2023. First, Busse et al. (2024) reflect on co-design processes to strengthen collaboration in a landscape lab seeking to enable a transformation towards insect-friendly agricultural landscapes. Next, Rojas Gómez (2024) examines agricultural innovation in agroecosystem living labs using a biocultural perspective and participatory action research approach, the combination of which yields a more holistic framework for agroecological transition in the Global South. Colombo et al. (2024) then explore the potential benefits – but also the potential pitfalls – in the application of the agroecology living lab approach to increase the diversity, adaptability, and scalability of innovations in organic farming. Finally, McPhee and Schwarz (2024) contribute an open letter to examine the recent surge of international attention and implementation for living labs for innovation in agriculture and pose key questions for discussion by the international community to help shape the future direction of the approach in this sector.

This overview of the 16 publications in this special issue highlights the diversity and versatility of living labs and collaborative innovation in terms of topics and themes covered. With this collection, we hope to have contributed to this still rapidly evolving and growing field of innovation management practice based upon multi-stakeholder co-creation, real-life experimentation and inclusive, collaborative approaches. Both the more theoretical as well as the practitioner-oriented contributions portray a rich, blossoming field that is trying to find concrete and applicable approaches for responsible innovation solving our contemporary complex issues and wicked problems. If you want to contribute or find out more, catch us at one of the ISPIM events where we always have a dedicated “Living Labs” paper track or at one of the other living lab related events such as the Open Living Lab Days or the International Forum on Agroecosystem Living Labs. Future topics and directions of living lab research include an increased harmonisation of the concepts and terminology used in order to better align but also differentiate approached according to the context and topic in which they are used and deployed. Second, more focus should be put on living lab outcomes and impact, moving beyond traditional top-down KPI's towards more co-creative, bottom-up approaches to assess and demonstrate impact and value creation. Third, the links with established and related innovation concepts should be reinforced and made more apparent (e.g. user innovation, open innovation, and responsible innovation). The same goes for emerging approaches such as futures thinking. We strongly believe that more research on these topics will enable living lab practice to become even more effective and widespread as answer to our society's most complex and wicked challenges.

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Authorship Contribution Statement

Seppo Leminen initiated the concept for the Special Issue, developed the overarching theme, call for papers, and oversaw the initial guest editorial workflow.

Chris McPhee oversaw the overall guest editorial workflow, coordinated the peer review process and conducted the initial drafting of the Guest Editorial, synthesizing key themes and contributions from the accepted articles.

Dimitri Schuurman managed the peer review process in collaboration with the journal's editorial office, contributed to editorial decisions on submitted manuscripts, and facilitated the progress of the Special Issue. He also provided critical revisions and finalised the manuscript of the Editorial. All authors reviewed and approved the final version of the Guest Editorial.

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